

**CASE NUMBER: 15SN0605**

**APPLICANT: Robert Steele, President Board of Trustees**



**STAFF'S ANALYSIS  
AND  
RECOMMENDATION**

**Planning Commission (CPC)**

**Public Hearing Date:**

JANUARY 20, 2015

**CPC Time Remaining:**

100 DAYS

**Applicant's Agent:**

JOSIE LODDER

(704-560-1422)

**Applicant's Contact:**

ROBERT STEELE

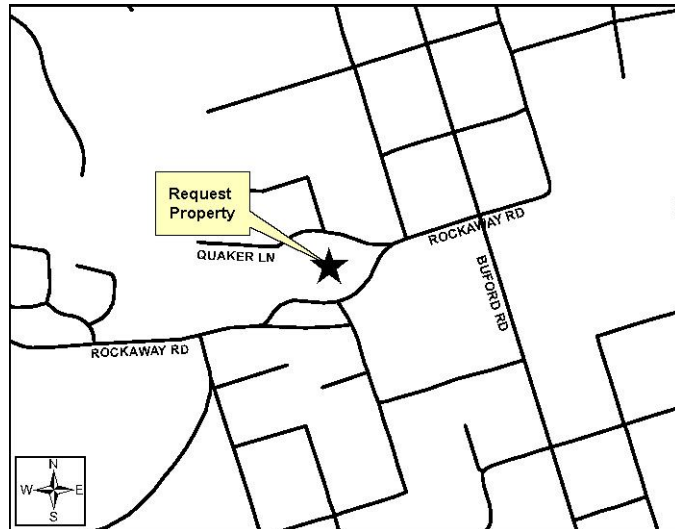
(840-272-8745)

**Planning Department Case Manager:**

RYAN RAMSEY (804-768-7592)

**CHESTERFIELD COUNTY, VIRGINIA**

Magisterial District: **MIDLOTHIAN**



**APPLICANT'S REQUEST**

Conditional use to permit a communications tower (data node antenna) in a Residential (R-15) District).

An antenna (data node/small cell) mounted on existing recreational light pole is planned.

(NOTES: A. Conditions may be imposed or the property owner may proffer conditions.

B. Under the Federal Telecommunications Act, localities cannot regulate cell towers on the basis of possible health or environmental effects of radio frequency emissions.)

**RECOMMENDATION**

STAFF

RECOMMEND APPROVAL

- Complies with Comprehensive Plan
- Consistent with Telecommunications Tower Siting Policy criteria

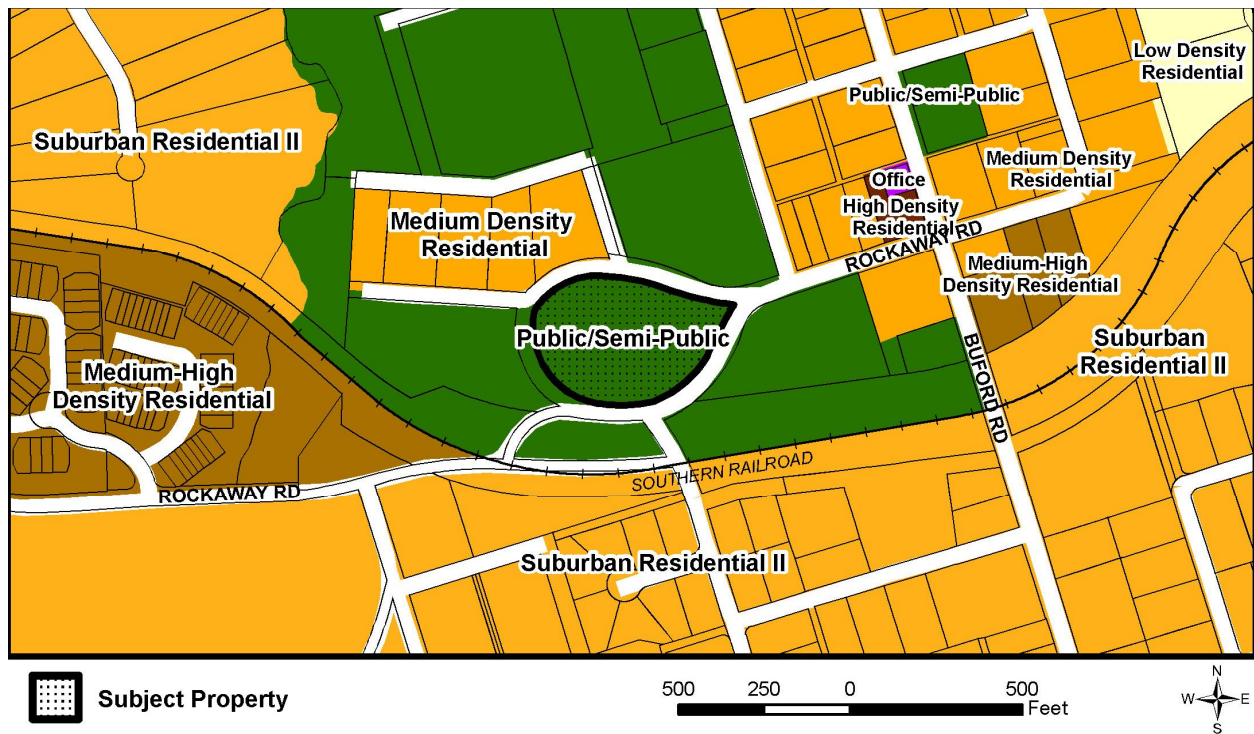
SUMMARY OF IDENTIFIED ISSUES	
Department	Issue
PLANNING	-
FIRE	-
CDOT	-
VDOT	-
UTILITIES	-
ENVIRONMENTAL ENGINEERING	-



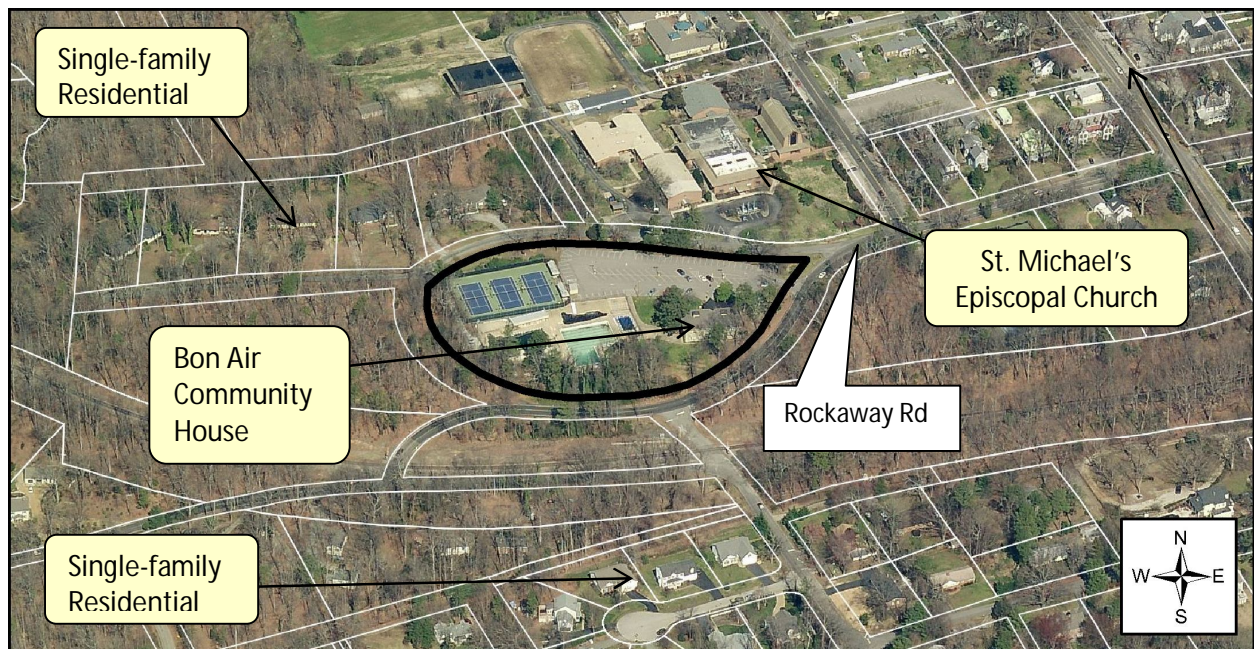
## Map 2: Comprehensive Plan (The Bon Air Community Plan)

Classification: **PUBLIC/SEMI-PUBLIC**

The designation suggests the property is appropriate for public/semi-public uses.



## Map 3: Surrounding Land Uses & Development



## PLANNING

Staff Contact: Ryan Ramsey (804-768-7592) ramseyrp@chesterfield.gov

### PROPOSAL

An antennae (data node/small cell) mounted to an existing recreational light pole within the Bon Air Community House complex is planned.

This proposal consists of a cylindrical antenna, approximately fifteen (15) inches in diameter and two (2) feet in height, top-mounted onto a five (5) foot mast on the top of a recreational light pole. To minimize visibility, the antenna will be painted to match the utility pole. (Proffered Condition 2.b.)

### PUBLIC FACILITIES PLAN

The Public Facilities Plan, an element of the Comprehensive Plan, encourages:

- co-location on existing telecommunications towers, or
- architectural incorporation into existing building features

Where co-location or architectural incorporation is not feasible, in areas designated for residential development, the Plan suggests that towers should be located and designed to conceal these facilities to the greatest degree feasible and minimize their visual impact.

### TOWER SITING POLICY

The Policy establishes guidelines for design, setbacks and security. Elements of the Policy applicable to the proposal are as follows:

- Prohibits signs, except as required by state or federal guidelines
- Provides for screening of ground mounted equipment
- Requires certification of structural integrity
- Requires removal when communications use ceases for more than twelve (12) consecutive months

The following provides an overview of proffered conditions to mitigate the impact of the tower on area properties:

General Overview	
Requirements	Details
Signage	<ul style="list-style-type: none"> <li>Not permitted, unless otherwise required by applicable (federal or state) law</li> </ul> <i>Proffered Condition 1 Policy</i>
Location, Design, Color and Lighting	<ul style="list-style-type: none"> <li>Located on existing light pole, as shown on Attachment 2</li> <li>Designed as shown on Attachment 3</li> <li>Painted to match recreational light pole</li> <li>Lighting not permitted</li> </ul> <i>Proffered Condition 2 Plan and Ordinance</i>
Screening	<ul style="list-style-type: none"> <li>Mechanical equipment screened per ordinance</li> </ul> <i>Proffered Condition 3 Policy</i>
Structural Integrity	<ul style="list-style-type: none"> <li>Provide certification prior to use</li> </ul> <i>Proffered Condition 4 Policy</i>
Height	<ul style="list-style-type: none"> <li>Not to exceed 35 feet</li> </ul> <i>Proffered Condition 5</i>
Removal	<ul style="list-style-type: none"> <li>Required if use ceases for more than 12 consecutive months</li> </ul> <i>Proffered Condition 6 Policy</i>

As proffered, the proposed communications tower complies with the Comprehensive Plan and is consistent with the Telecommunications Tower Siting Policy and Ordinance criteria.

## PUBLIC FACILITIES

### FIRE SERVICE

Staff Contact: Greg Smith (804-706-2012) smithgd@chesterfield.gov

#### Nearby Fire and Emergency Medical Service (EMS) Facilities

Fire Station	The Buford Fire Station, Company Number 9
EMS Facility	The Forest View Volunteer Rescue Squad

When the property is developed, the number of hydrants, quantity of water needed for fire protection, and access requirements will be evaluated during the plans review process.

### COUNTY DEPARTMENT OF TRANSPORTATION

Staff Contact: Jim Banks (804-748-1037) banksj@chesterfield.gov

The Comprehensive Plan, which includes the Thoroughfare Plan, identifies county-wide transportation needs that are expected to mitigate traffic impacts of future growth. The anticipated traffic impact of the proposal has been evaluated and it is anticipated to be minimal.

### VIRGINIA DEPARTMENT OF TRANSPORTATION

Staff Contact: Brian Lokker (804-674-2384) brian.lokker@vdot.virginia.gov

#### VDOT Land Use Regulations

Traffic Impact Analysis (24VAC30-155)	-
Access Management (24VAC30-73)	-
Subdivision Street Acceptance (24VAC30-91/92)	-
Land Use Permit (24VAC30-151)	-
Summary	VDOT has no comment on this case.

**COUNTY COMMUNICATIONS**

Staff Contact: Robert Vest (804-717-6950) [vestr@chesterfield.gov](mailto:vestr@chesterfield.gov)

The system installation may be approved when meeting the standard conditions regarding interference to Chesterfield County Radio and Microwave Systems.

**COUNTY AIRPORT**

Staff Contact: Jeremy Wilkinson (804-768-7700) [wilkinsonj@chesterfield.gov](mailto:wilkinsonj@chesterfield.gov)

This request will have no impact on the County Airport.

**WATER AND WASTEWATER SYSTEMS**

Staff Contact: Jamie Bland (804-751-4439) [blandj@chesterfield.gov](mailto:blandj@chesterfield.gov)

The proposal's impacts on the County's utility system are detailed in the chart below:

<b>Water and Wastewater Systems</b>			
	<b>Currently Serviced?</b>	<b>Size of Existing Line</b>	<b>Connection Required by County Code?</b>
<b>Water</b>	Yes	8"	Yes
<b>Wastewater</b>	No	N/A	No

Additional Information:

The proposed request will not impact the public water and wastewater systems.

**ENVIRONMENTAL**

Drainage, Erosion and Water Quality

Staff Contact: Doug Pritchard (804-748-1028) [pritchardd@chesterfield.gov](mailto:pritchardd@chesterfield.gov)

Environmental Engineering has no comment on this request.

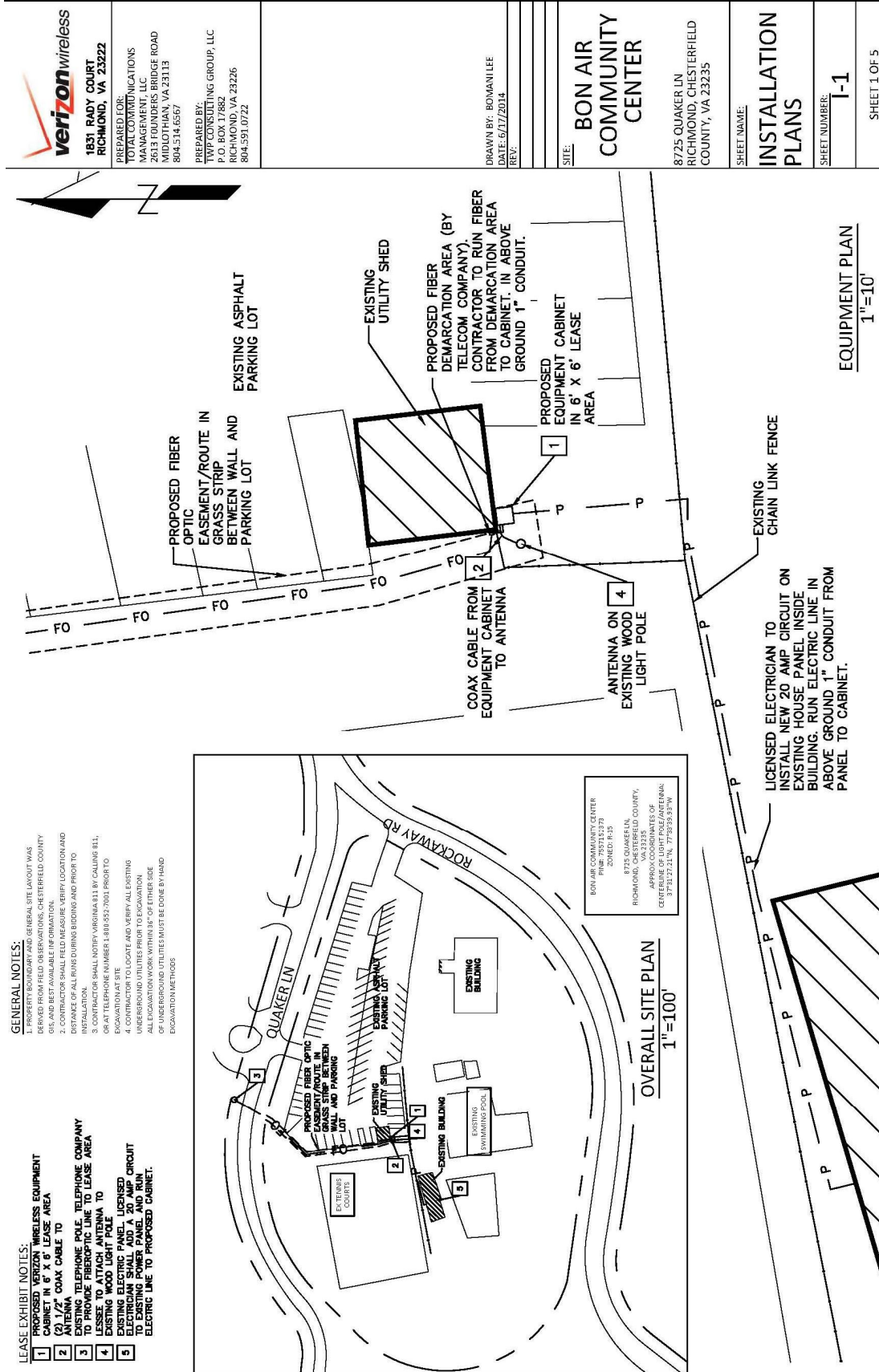
<b>CASE HISTORY</b>	
<b>Applicant Submittals</b>	
<b>10/31/14</b>	Application submitted
<b>12/23/14</b>	Proffers were submitted
<b>Community Meetings</b>	
<b>12/2/14</b>	<b>Issues Discussed</b> <ul style="list-style-type: none"> <li>• Midlothian Planning Commissioner, applicant, agent and staff attended this meeting at the Bon Air Community House</li> <li>• Location, size and shape of antenna</li> </ul>

**PROFFERED CONDITIONS**

1. There shall be no signs permitted to identify this use other than those required by applicable law and regulation. (P)
2. The color, design and lighting system for the communications tower (data node antenna) shall be as follows:
  - a. The communications tower shall be a small cell/data node structure mounted onto the top of utility (light) pole, generally as located on Attachment 2 and designed on Attachment 3.
  - b. The components of the small cell equipment shall have a durable finish color that matches the utility pole upon which it is located, as approved by the Planning Department. The finish color shall be maintained to address fading, flaking, or other finish issues, as determined by the Planning Department, to include matching any repainting of the utility structure upon which it is mounted.
  - c. The communications tower (data node antenna) shall not be lighted. (P)
3. Other than the data node antenna, any mechanical equipment shall comply with the Zoning Ordinance relative to screening of mechanical equipment in O, C and I Districts. (P)

(STAFF NOTE: The Zoning Ordinance requires the screening of mechanical equipment located on the building or ground from adjacent properties and public rights of way.)
4. Prior to use of this communications tower (data node antenna), the owner of the communications tower (data node antenna) shall obtain approval of the structural integrity by a registered professional engineer licensed in Virginia and a copy of the report filed with the Planning Department. (P)
5. The communications tower (data node antenna), located on top of a utility (light) pole, shall not exceed a height of 35 feet. (P)
6. At such time that the communications tower (data node antenna) ceases to be used for communications purposes for a period exceeding twelve (12) consecutive months, the owner/developer shall dismantle and remove the tower and all associated equipment from the property. (P)

## SITE LAYOUT



## TOWER ELEVATION



1831 RADY COURT  
RICHMOND, VA 23222

PREPARED FOR:  
TOTAL COMMUNICATIONS  
MANAGEMENT, LLC  
2613 FOUNDERS BRIDGE ROAD  
RICHMOND, VA 23113  
804.514.6567

PREPARED BY:  
TWP CONSULTING GROUP, LLC  
P.O. BOX 17882  
RICHMOND, VA 23226  
804.591.0722

DRAWN BY: BOWMAN LEE

DATE: 6/17/2014

SITE:

BON AIR  
COMMUNITY  
CENTER

8725 OLAKER LN  
RICHMOND, CHESTERFIELD  
COUNTY, VA 23235

SHEET NAME:

INSTALLATION  
PLANS

SHEET NUMBER:

1-2

SHEET 2 OF 5

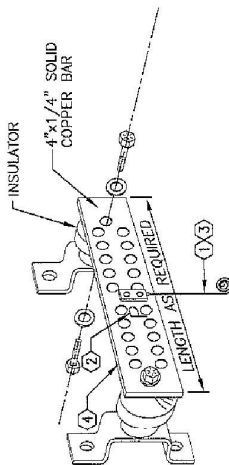
TOP OF SMALL CELL ANTENNA  
HEIGHT =  $\pm 35'$  AGL  
TOP OF EX WOOD LIGHT POLE  
HEIGHT =  $\pm 30'$  AGL

APPROX 36LF OF (2)  
1/2" COAX FROM  
EQUIPMENT CABINET TO  
ANTENNA

ANTENNA  
EQUIPMENT  
CABINET

#2 AWG SOLID  
GROUNDING  
LEADS (TYP)  
GROUNDING  
BAR

## GROUNDING DIAGRAM



## GROUND BAR DETAIL NOTES:

1. TWO-HOLE LONG BARREL COMPRESSION LUG WITH 2 AWG STRANDED COPPER CONDUCTOR AND GREEN THIN INSULATION TO GROUND BAR. ROUTE CONDUCTOR AS APPLICABLE TO EXISTING BUILDING GROUNDING SYSTEM.
2. USE PERMANENT MARKER TO LABEL THE WHOLE BAR AS "P" WITH 1" HIGH LETTERS.
3. FOR GROUND BAR LOCATED OUTDOORS, ON-GRADE ONLY, EXOTHERMICALLY WELD A 2 AWG BARE TINNED COPPER CONDUCTOR TO GROUND BAR AND EXOTHERMICALLY WELD TO BURIED GROUND CONDUCTOR.
4. GROUND BARS SHALL BE TINNED COPPER AND SHALL BE ENGRAVED OR IMPRESSED "STOLEN-DO NOT RECYCLE" AND OR "PROPERTY OF VMC" ETCHED OR STAMPED WITH SITE FA LOCATION AND SECURED WITH ANTI-THEFT HARDWARE.

## GROUND NOTES:

1. EGR-(EXTERIOR GROUND RING) THE BUILDING GROUNDING SYSTEM SHALL BE INSTALLED TO THE EXTERIOR GROUND RING. THE BUILDING GROUNDING SYSTEM SHALL BE PROVIDED FOR THE FOLLOWING:
  - A. TWO (2) GROUND LEADS FOR THE TOWER BOTTOM GROUND BAR.
  - B. TWO (2) GROUND LEADS SHALL BE PROVIDED FOR EACH ICE-BRIDGE POST.
  - C. TWO (2) GROUND LEADS SHALL BE CAD-WELDED TO THE BASE OF POLYPHASER STRAPS AT EACH END OF THE SNOWMOW BARS THAT IS PROVIDED.
  - D. GROUND LEADS SHALL BE PROVIDED FOR EACH MECHANICAL UNIT.
  - E. GROUND LEADS SHALL BE PROVIDED FOR EACH MECHANICAL UNIT.
  - F. GROUND LEADS SHALL BE PROVIDED FOR EACH CORNER OF THE BUILDING AND TWO CENTER LEADS.
  - G. ONE (1) GROUND LEAD SHALL BE PROVIDED FOR THE ELECTRICAL DISCONNECT AT THE BUILDING.
  - H. ONE (1) GROUND LEAD SHALL BE PROVIDED FOR THE METER BASE.
2. POLYPHASER-CONTRACTOR SHALL ATTACH THE POLYPHASER GROUND STRAPS TO THE BUILDING AND CONNECT THEM TO THE EXTERIOR GROUND RING PER SPECIFICATIONS. VERIZON WIRELESS SHALL FURNISH THE POLYPHASER GROUND STRAPS.
3. GROUND RING-CONTRACTOR SHALL INSTALL A GROUND RING PER VERIZON WIRELESS SPECIFICATIONS. THE GROUND RING MUST BE INSTALLED TO A DEPTH OF 30", 8" GROUND RODS SPACED "TP TO TP" AND IN EACH CORNER. #2 TINNED SOLID COPPER, EXOTHERMIC WELDS ONLY BELOW GROUND. #2 LEADS FROM THE EGR ARE TO BE SLEEVED IN PVC TOWER ATTACHMENTS, EXTERIOR BUSH BARS, ICE BRIDGE POSTS, AND POLYPHASER ATTACHMENTS. EXTERIOR LEADS FROM THE EGR ARE TO BE BROUGHT INTO THE BUILDING AND DOUBLE C-TAPPED TO THE #2 STRANDED DOWN-LEADS INSIDE OF THE BUILDING. THE GROUND RING SHALL BE EXOTHERMICALLY WELDED TO THE EXISTING TOWER GROUND RING AT A MINIMUM OF TWO POINTS AND SHOULD BE ACCESSIBLE BY A CAPPED PVC TEST WELL. ADDITIONALLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE THAT MAY BE CAUSED TO ANY EXISTING GROUND RING DURING THE INSTALLATION OF THE NEW GROUND RING.

5. RESISTIVITY/EOR INSPECTION-24 HOUR NOTICE SHALL BE GIVEN TO VERIZON WIRELESS BEFORE THE COMPLETION OF THE EOR. TO ALLOW FOR AN OPEN TRENCH INSPECTION OF THE SYSTEM, AND TO WITNESS THE GROUND FIELD RESISTIVITY TEST. A THREE (3) HOUR TRENCH INSPECTION SHALL BE REQUIRED WITH AN EXPECTED READING OF LESS THAN 100 OHM-FT. RESISTIVITY TEST RESULTS WITH A COPY OF THE TEST UNITS MUST BE PROVIDED TO VERIZON WIRELESS. RECENT CALIBRATION CERTIFICATION IS REQUIRED.

6. ELECTRICAL SERVICE- CONTRACTOR SHALL FURNISH AND INSTALL ONE OF 2" TYPE-C PVC CONDUIT FROM THE BUILDING ELECTRICAL DISCONNECT TO THE COMPOUND'S METER BASE. CONTRACTOR SHALL FURNISH AND INSTALL THE ELECTRICAL SERVICE FOR THE BUILDING, CONSISTING OF THE CONDUIT AND WIRE FOR A 200 AMP, SINGLE PHASE SYSTEM.

7. TELECOM CONDUIT-CONTRACTOR SHALL FURNISH AND INSTALL A 2" TYPE-C PVC CONDUIT FROM THE TELEPHONE PROVIDER'S PEDestal OR CABINET TO THE EQUIPMENT SHELTER.

8. EXISTING BELOW GRADE GROUNDING SYSTEM IS BASED ON PROTOTYPICAL GROUNDING ABOVE GRADE BONDING CONDITIONS. THE CONTRACTOR SHALL VERIFY THAT THE GROUNDING SYSTEM IS IN PLACE AND SHALL INDICATE EXACT ROUTING OF THE GROUNDING SYSTEM USING SURFACE MARKING METHOD. WHERE PLANS INDICATE TO CONNECT TO EXISTING GROUNDING CONDUCTOR, USE CARE TO MAINTAIN CONTINUITY OF EXISTING GROUND SYSTEM WHILE PERFORMING WORK UNDER THIS CONTRACT.

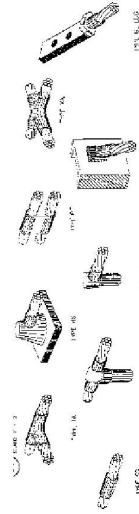


PHOTO SIMULATION

